

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claim:

1. (Previously Presented) An apparatus for characterizing a particle, wherein the apparatus comprises an electrical charge sensor adapted to determine an electrical charge on the particle and, an optical device adapted to determine a second characteristic of the particle, wherein the apparatus is adapted to provide an indication of the nature of the particle according to the charge and the second characteristic.
2. (Previously Presented) The apparatus according to Claim 1, wherein the second characteristic is size.
3. (Cancelled)
4. (Previously Presented) The apparatus according to Claim 1, wherein the electrical charge sensor includes a pathway for the particle and a plurality of electrodes spaced along the pathway arranged to provide an electrical output as the particle passes along the pathway.
5. (Previously Presented) The apparatus according to Claim 4, wherein the pathway is provided by an electrically insulative tube and, wherein the plurality of electrodes are provided on an external surface of the tube.
6. (Previously Presented) The apparatus according to Claim 4, wherein there are five electrodes spaced along the pathway.
7. (Previously Presented) The apparatus according to Claim 4, wherein the outermost electrodes are grounded, wherein two electrodes adjacent to outermost two electrodes are interconnected, and wherein a signal is derived from the difference between the central electrode and the two interconnected electrodes.
8. (Previously Presented) The apparatus according to Claim 5, wherein the tube has an internal diameter of substantially 0.5mm.

9. (Previously Presented) The apparatus according to Claim 5, further comprising a filter adapted to prevent particles greater than substantially 10 μ m from entering the tube.
10. (Previously Presented) A method of characterizing a particle, wherein the method comprises the steps of measuring charge on the particle, measuring an optical characteristic of the particle and providing an output indicative of the nature of the particle from the combination of both the charge and the optical characteristic.
11. (Previously Presented) A method according to Claim 10, wherein the optical characteristic is indicative of the size of the particle.
12. (Previously Presented) An apparatus for measuring a charge on a particle, wherein the apparatus comprises a tube comprising a first end and a second end along which the particle is arranged to flow, a first and a second outer electrode, wherein the first outer electrode is located adjacent to the first end and the second outer electrode is located adjacent to the second end, a third electrode adjacent to the first outer electrode and a fourth electrode adjacent to the second outer electrode, a fifth electrode located between the third and fourth electrodes, a connection connecting the first and second outer electrodes to ground, a connection connecting the third electrode to the fourth electrode and connecting the connected third and the fourth electrodes to a measuring circuit, and a connection connecting the fifth electrode to the measuring circuit, wherein the measuring circuit is adapted to subtract the signals on the third and fourth electrodes from the signal on the fifth electrode to derive a signal indicative of the charge on the particle.
13. (Withdrawn) An apparatus for characterizing a particle comprising an electrical charge sensor adapted to determine an electrical charge on the particle, wherein the electrical charge sensor comprising a pathway having at least three electrodes spaced along the length of the pathway comprising a central electrode and two outer electrodes, wherein the two outer electrodes are connected together, wherein a charge signal is derived from the difference between a charge on the central electrode and a charge on the connected two outer electrodes, and wherein the apparatus is adapted to derive an indication of the nature of the particles from the charge signal.

14. (Withdrawn) The apparatus according to Claim 13, further comprising a second device adapted to determine a second characteristic of the particle, and wherein the apparatus is adapted to characterize a particle using the combination of both the charge signal and the second characteristic.
15. (Withdrawn) The apparatus according to Claim 14, wherein the second characteristic is size.
16. (Withdrawn) The apparatus according to Claim 14, wherein the second device is an optical device.
17. (Cancelled).